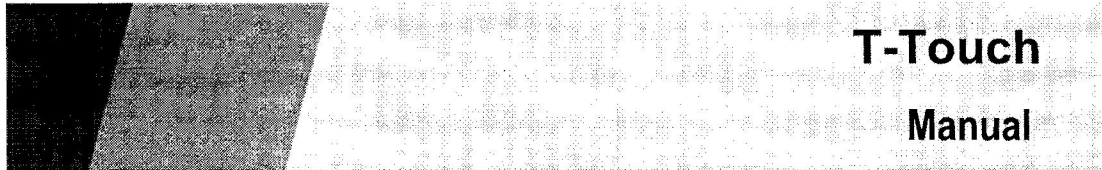


# ***T-Scale***



**T-Touch  
Manual**

**NS7  
User Guide**





## Declaration of Conformity

Manufacturer	TScale Electronics Mfg. (Kunshan) Co., Ltd
Model	NS7
Report No	R0317030159E
EMC Directive	2014/30/EU
Applicable Standards	EN 55032:2015 EN61000-3-2: 2014, EN61000-3-3: 2013, EN 55024: 2010+ A1 :2015

Note: The declaration is only valid if the non-automatic weighing instrument was verified by the manufacturer or with a certificate of conformity issued by a notified body.

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T-Scale reserves the right to make changes to the technology, features, specifications and design of the equipment without notice.

All information contained within this publication was to the best of our knowledge timely, complete and accurate when issued. However, we are not responsible for misimpressions which may result form the reading of this material.

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## INTRODUCTION

T-Touch Indicators are specially developed for to meet the Industrial applications, which is Linux based and Touch Operating System. It can connect to the multi load cells and choose different weighing units according to the use;

### Features

- Resistive -Touch Operating System
- 7" TFT LCD display
- Selectable weighing units
- Built-in real time clock
- Up to 8 load cell
- Selectable digital / analog load cell operation.
- 1GB RAM and 8GB FLASH Memory
- Unlimited\* data storage capacity
- 9999 each ID storage capacity
- Up to 8 ID selectable
- Weighing & Counting Operation
- Multi calibration options
- Multi Print formats and Customized Print formats
- Com 1: Serial communication port can connect with PC, mini printer, Ticket Printer, Label printer etc.
- Report Management: Daily, Monthly, Plate, Product and Client wise reports.
- Options: Wifi
- Optional multi - language selection.
- Optional digital load cell

Note: \* Data storage depend the availability of free RAM Memory

# 1. SPECIFICATIONS

## 1.1. General

Capacity	Free setting
External Resolution	3000d (OIML)/30000d (Non OIML)
Tare range	Max-1d
AD Type	Sigma delta
AD Speed	Max. 60 times/second
Internal Counts	1,000,000
Weighing Unit	kg, g, lb, oz, t
Calibration Unit	kg, lb
Load Cell Excitation	5VDC
Input Signal Range	0~20mv
Zero Point Signal Range	0~5mv
Load cell Sensitivity	1mv/v~3mv/v
Load cells	8 load cells; for non-approve up to 16
Operation Temperature	0~40°C (OIML) / 0~50°C (Non OIML)
Operation Humidity	<95%
Display	7" TFT LCD
Display resolution	800x480
Display H/V ratio	16:9
Touch Control Mode	Resistance Touch Screen
Communication Interface	1x RS-232, 1x RJ-45, 1xUSB,
Optional interface	WIFI
Operating System	TOS II
CPU	CORTEX A9
RAM	1GB
Data memory	8GB
Power	AC Adapter 12V/2500mA or main power 110V~220V

Specifications are subject to change without notice

## 2. INSTALLATION

### 2.1 Requirements

The mounting location must be a stable surface and free of heat, water and humidity.

When you receive the Indicator, inspect it to make sure that it is not damaged and that all are parts are included:

- Remove the Indicator from the carton.
- Remove the protective covering. Store the packaging and to use if you need to transport the scale later.
- Inspect the indicator for damage.
- Make sure all components are included.
  1. Indicator
  2. Adaptor
  3. Manual
  4. Load cell Output connector (Optional)
  5. RS-232 Output Connector (Optional)

### Installation

- Place the Indicator on a table or use indicator holder to connect with stand.
- Connect the platform load cell cable in to the indicator load cell connector. Load cell connector is locating back side of the indicator.
- Connect the adaptor pin in to the indicator adaptor jack. Adaptor jack is locating, back side of the indicator.
- Adaptor connects into your AC power socket. Pluggable equipment must be installed near an easily accessible socket outlet with a protective ground/ earth contact.
- Turn on the On/Off key. If you want to turn off, press the key again.
- The scale will show T-Touch system and follow to show company logo, waiting a few seconds, display will be come to normal weighing mode. Then you can start your operation.
- Calibrate with exact calibration weights, minimum 1/3 of the scale capacity want to use for calibration. For calibration see details in parameter.

**2.2. Load Cell Connection.****Analog load Cell (DB9 Female Connector)**

Pin	Connection
1	Excitation +
2	Sense +
3	Shield
4	Sense -
5	Excitation -
6	NC
7	Signal -
8	Signal +
9	NC

Pin	Connection
1	Excitation +
2	Sense +
3	Shield
4	Sense -
5	Excitation -
6	NC
7	Signal -
8	Signal +
9	NC
10	NC
11	NC
12	NC
13	NC
14	NC
15	NC

**7Pin Air Connector**

Pin	Connection
1	Signal -
2	Signal +
3	Shield
4	Excitation -
5	Sense -
6	Sense +
7	Excitation +

**5Pin Air Connector**

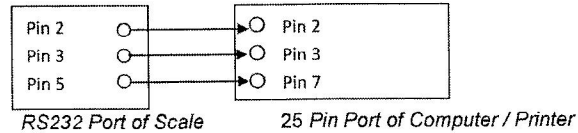
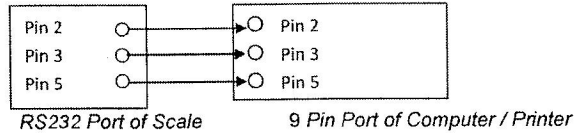
Pin	Connection
1	Signal -
2	Signal +
3	Shield
4	Excitation -
5	Excitation +

**Note:** if using 5 wire load cell, please short-circuit SEN+ to EXC+, and SEN- to EXC-.

### 2.3 RS-232 Connection

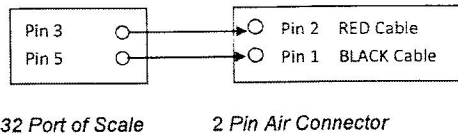
The RS-232 port is located on the side or rear of the scale (refer to component description). It is a 9 Air connector, and its signals are defined in the following.

#### Serial Interface: Scale – PC / Printer connection:



***If not communicating, please interchange one of the connector Pin 2 and Pin 3 connections***

#### Indicator / Scale – TP-03 / TP-05 Score Board Connection:




#### Note:

- \* Com 1 / Com 2 port could be choose for score board communication.
- \* Indicator want to turn on first, then follow to turn on score board for to detect baud rate automatically.
- \* Baud rate can be select 600 ~ 9600 only.



## 2.4 Power

The power supply accepts the voltage of charger 12VDC/2500mA from the external power adaptor with input from 100~240 VAC 50/60 Hz.

Adaptor polarity should be 

### Battery:

The Indicator (analog system) can optionally be operated from the internal rechargeable battery 6V/4Ah.

### Connect Adaptor and Charging:

To charge the battery insert the adaptor pin to jack. Adaptor simply plug into the mains power.

The scale not requires turning on for the charging. The battery should be charged for 12 hours for full capacity.

Right down side of the keyboard there is an LED to indicate the status of battery charging. When the scale is plugged into the mains power the internal battery will be recharged. If the LED is green, the battery has a full charge. If it is red, the battery is nearly discharged.

Do not use any other type of power adaptor than the one supplied with the scale.

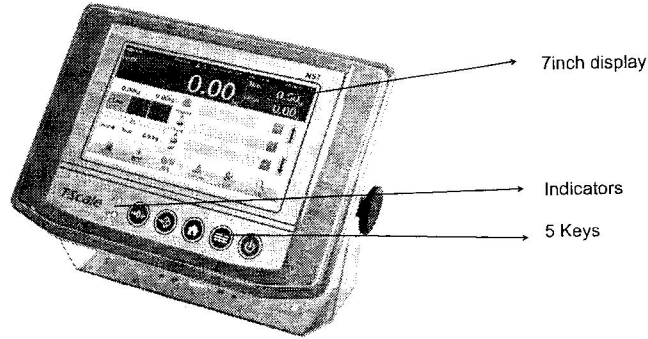
Verify that the AC power socket outlet is properly protected.

**Note: Please charge the battery before using the scale for the first time.**

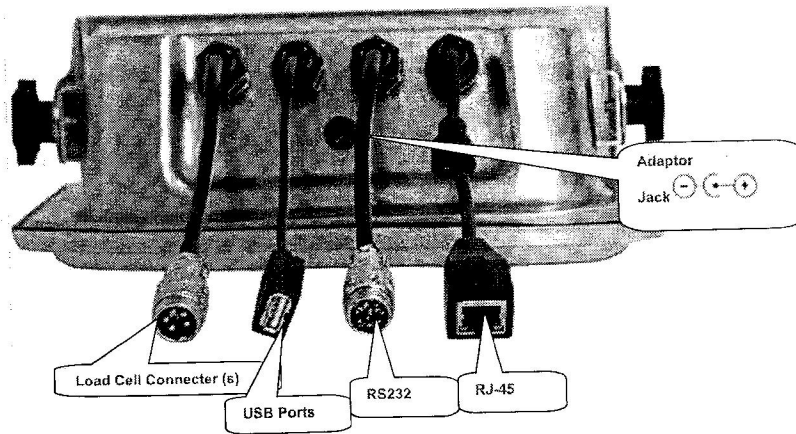
**Before starting to operate, please connect to the power, platform and set up correctly by the help of Technician.**

### 3. MODELS & CONNECTIONS










#### 3.1. NS7 Indicator



#### 3.2. Connections



### 3.3 Key functions

Keys	Description
	<p>Power on</p> <p>Press and hold  key until to hear a beep sound. It will take around 30 seconds for to run the TOS operating system and application software.</p> <p>Standby</p> <p>Press  key for to keep display standby / sleep. Press ON/OFF key again for to turn on the display.</p> <p>Power off</p> <p>Press and hold  key until to show a Power Off window. Touch option YES to power off or NO to back to use.</p> <p>Reboot</p> <p>Hold  key 10 seconds, the system will reboot to recover from abnormal situation</p>
	Press key for to go to the menu operation, a menu table will be show at the bottom of the display.
	Press key 5 seconds from any 5 in 1 operation can get back to home display
	Press key for to tare the scale. The weight that was displayed will be store as the tare value and that value will be subtracted from the measurement, leaving zero on the display. The "Net" indicator will be on.
	Press key to set the reading to zero (within the allowed range of 2%max). Usually it's required only when the platform is empty. When the zero point is obtained, the zero indication will be show

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